

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
3 June 2004 (03.06.2004)

PCT

(10) International Publication Number  
WO 2004/045828 A1

(51) International Patent Classification<sup>7</sup>: B29C 47/12, 33/36, 33/30

(21) International Application Number:  
PCT/CA2003/001719

(22) International Filing Date:  
12 November 2003 (12.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2,411,881 15 November 2002 (15.11.2002) CA

(71) Applicants and

(72) Inventors: LUPKE, Manfred, A., A. [CA/CA]; 92 Elgin Street, Thornhill, Ontario L3T 1W6 (CA). LUPKE, Stefan, A. [CA/CA]; 32 Vintage Lane, Thornhill, Ontario L3T 1X6 (CA).

(74) Agents: JOHNSON, Scott, T. et al.; Dennison Associates, 133 Richmond Street West, Suite 301, Toronto, Ontario M5H 2L7 (CA).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

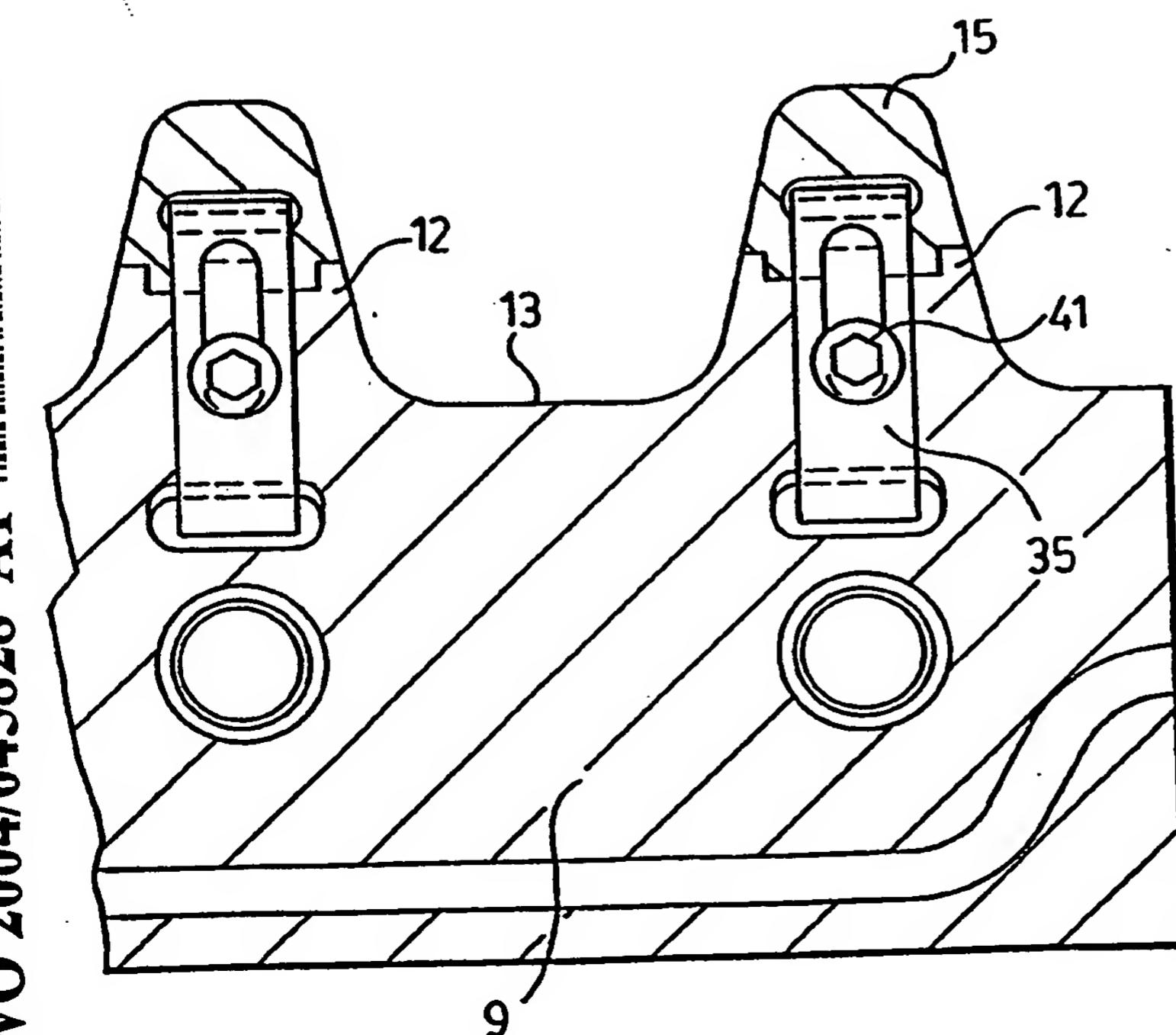
(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MOLDING APPARATUS WITH MOLD BLOCKS HAVING PROFILED FACE ADJUSTMENT



WO 2004/045828 A1

(57) Abstract: A pipe molding apparatus includes a plurality of mold blocks (9) which move along a molding path to form double wall plastic pipe having an outer pipe wall with corrugations which set outside diameter of the pipe and an inner wall around a bore through the pipe. The mold blocks (9) have profiled faces which determine shape of the pipe. The profiled faces are reconfigurable in profile between first and second face profiles to vary both depth of the corrugations and diameter of the bore through the pipe without varying external diameter and while maintaining essentially constant wall thickness of the pipe.